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(54) Title: DATA TRANSMISSION METHOD, RADIO NETWORK SUBSYSTEM, AND USER EQUIPMENT

(57) Abstract

The invention relates to a method for transmitting data from a radio network subsystem (RNS) over a radio link (Uu) to user equipment (UE) in a mobile telephone system, a radio network subsystem, and user equipment. The radio network subsystem (RNS) transmits (604, 606) a dedicated physical channel to the user equipment (UE). The dedicated physical channel comprises a dedicated physical control channel and a dedicated physical data channel. The dedicated physical channel is formed by frames to be transmitted to the radio link (Uu). During transmission, the radio network subsystem (RNS) spreads (608, 610) each channel with a spreading code, the length of which spreading code, i.e. spreading factor, determines the data transmission rate. A spreading code is reserved for use by the radio link (Uu) in normal situations. In special situations (602), at least one frame of the dedicated physical data channel is spread with a shared spreading code. A shared spreading code is shorter than a spreading code used in a normal situation. The shared spreading code in question is shared by time division between the dedicated physical data channels of at least two different radio links (Uu).